Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

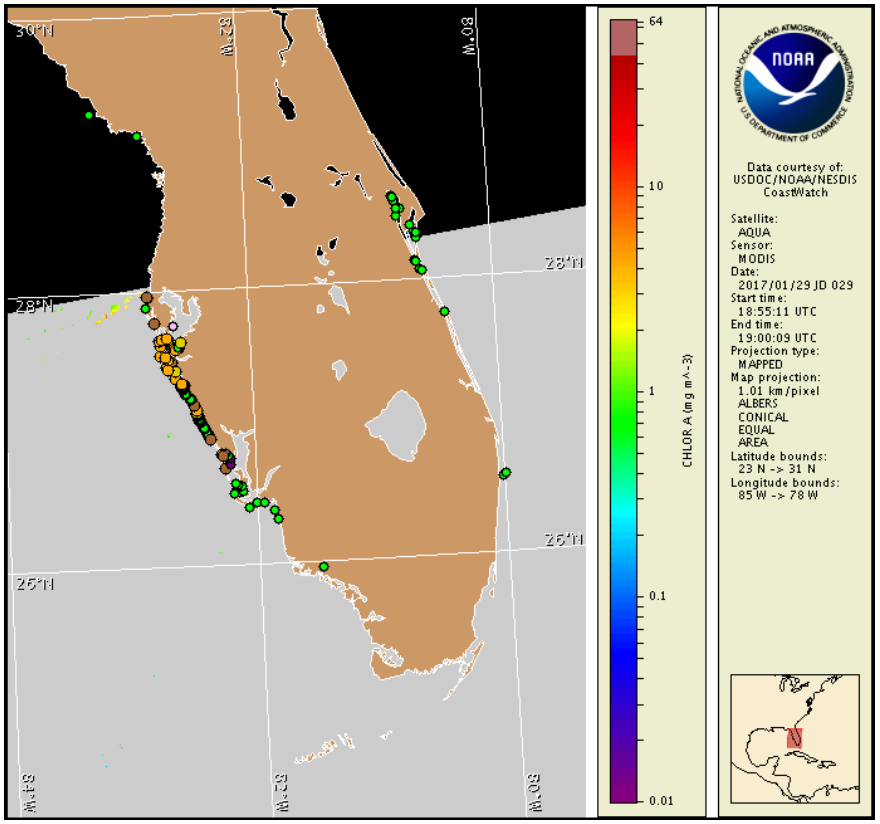
Monday, 30 January 2017

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, January 26, 2017



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from January 20 to 27: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Florida Fish and Wildlife Conservation Commission (FWC) Fish and Wildlife Research Institute. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/hab_publication/habfs_bulletin_guide.pdf

Detailed sample information can be obtained through FWC Fish and Wildlife Research Institute at:

http://myfwc.com/redtidestatus

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: http://tidesandcurrents.noaa.gov/hab/bulletins.html

Conditions Report

Not present to medium concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore portions of southwest Florida, and not present in the Florida Keys. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction. The highest level of potential respiratory irritation forecast for Monday, January 30 through Thursday, February 2 is listed below:

County Region: Forecast (Duration)
Northern Pinellas: Very Low (M-Th)
Southern Pinellas: Low (M-Th)
Southern Pinellas, bay regions: Moderate (M-Th)
Northern Manatee, bay regions: Moderate (M-Th)
Southern Manatee: Moderate (M-Th)
Southern Manatee, bay regions: Moderate (M-Th)
Northern Sarasota: Moderate (M-Th)
Northern Sarasota, bay regions: Moderate (M-Th)
Southern Sarasota: Low (M-Th)
Northern Charlotte: Low (M-Th)
Southern Charlotte: Low (M-Th)
Southern Charlotte, bay regions: Low (M-Th)
Northern Lee: Low (M-Th)
Northern Lee, bay regions: Low (M-Th)
Central Lee: Low (M-Th)
Central Lee, bay regions: Low (M-Th)
All Other SWFL County Regions: None expected (M-Th)

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at http://tidesandcurrents.noaa.gov/hab/hab_health_info.html. Over the past few days, reports of respiratory irritation and associated fish kills have been reported from Manatee, Sarasota, and Lee counties.

Analysis

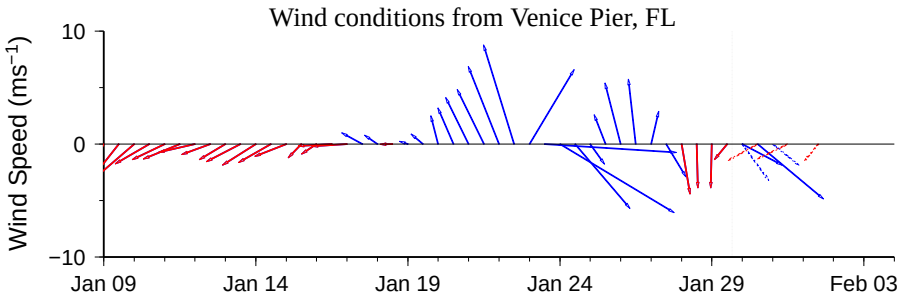
Recent samples received from along- and offshore southwest Florida, from Pinellas to Monroe counties, continue to identify not present to 'medium' concentrations of *Karenia brevis*, with the highest concentrations still present alongshore and in the bay regions of southern Manatee and northern Sarasota counties, with up to 'low b' concentrations of *K. brevis* still present in the bay regions of southern Charlotte County (FWRI, MML, SCHD; 1/20-1/27). Over the weekend, slight to moderate respiratory irritation and dead fish were reported from Sarasota County, and up to intense respiratory irritation and dead fish were reported in Manatee County (MML; 1/27-1/30). Slight respiratory irritation is newly reported from Captiva alongshore central Lee County, confirming southerly transport of the bloom (MML; 1/30). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: http://myfwc.com/redtidestatus.

Recent ensemble imagery (MODIS Aqua, 1/29), is completely obscured by clouds along-

and offshore southwest Florida from Pinellas County to the Florida Keys, preventing analysis.

Observed winds from over the weekend promoted southerly transport of the bloom. Additional sampling is recommended alongshore and in the bay regions of central Lee County where respiratory irritation has been observed but recent sampling indicates not present to 'background' concentrations of *K. brevis*.

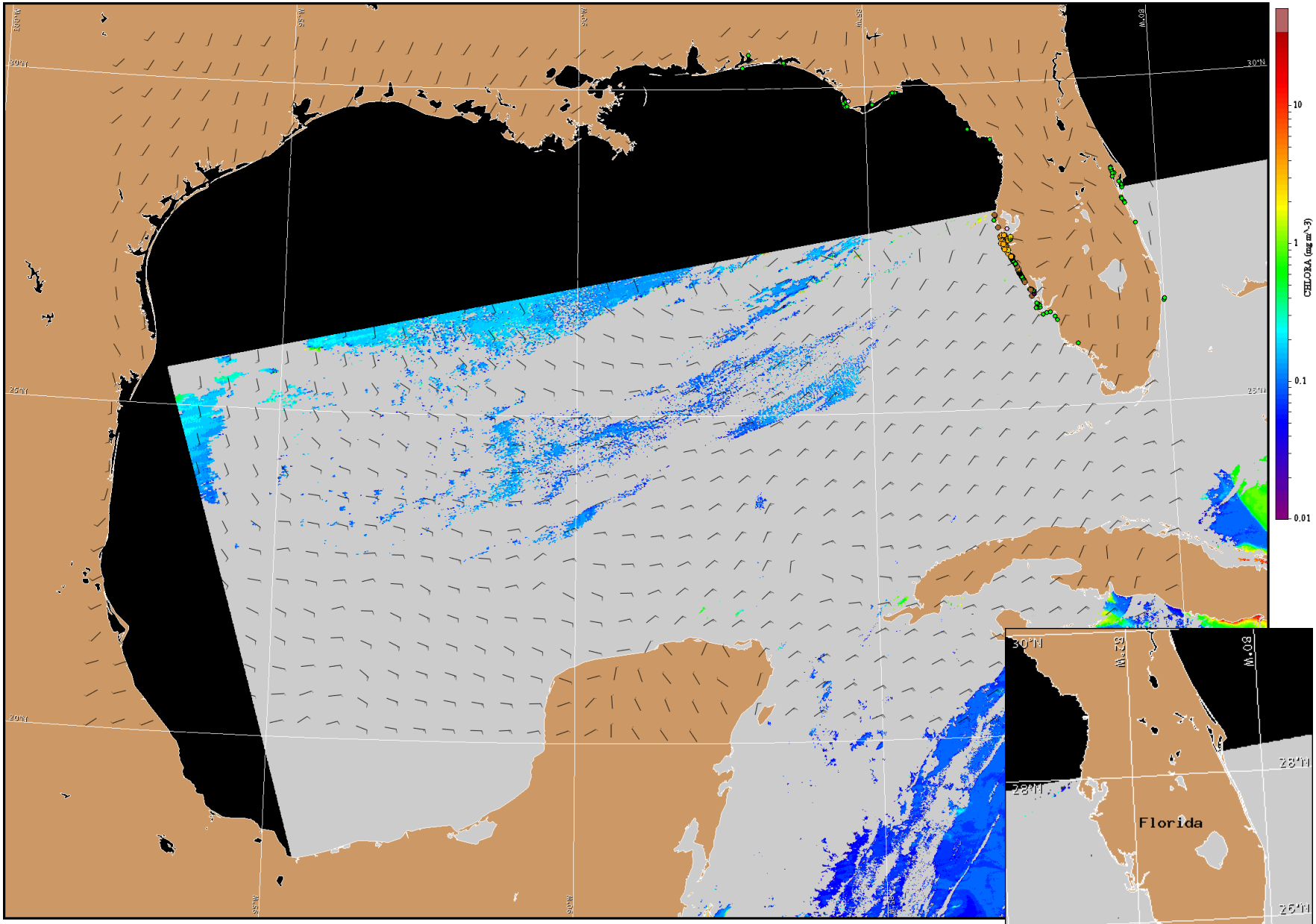
Keeney, Davis



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

Wind Analysis

Englewood to Tarpon Springs (Venice): North winds (10-20kn, 5-10m/s) today. East winds (10kn, 5m/s) Tuesday becoming south winds (5kn, 3m/s) in the afternoon and northwest to northeast winds (5-10kn, 3-5m/s) Tuesday evening. East winds Wednesday (10kn) becoming north to northeast winds (5-10kn) Wednesday night through Thursday.



Satellite chlorophyll image and forecast winds for January 31, 2017 12Z with points representing cell concentration sampling data from January 20 to 27: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Florida Fish and Wildlife Conservation Commission (FWC) Fish and Wildlife Research Institute. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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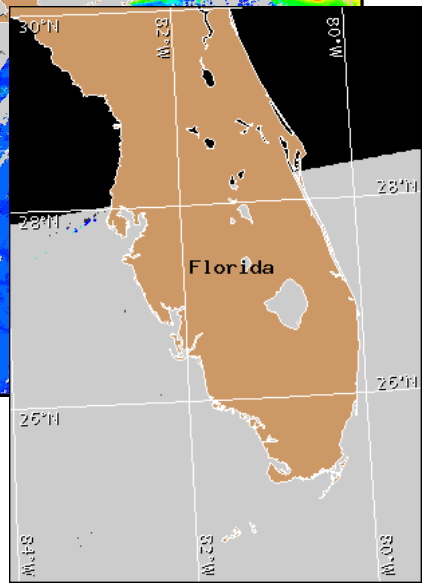

Verified and suspected HAB areas shown in red. Other areas with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).